



11/21/2014

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

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OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

November 21, 2014

Abby Wacek
Regulatory Consultant
Technology Sciences Group, Inc.
1150 18th Street, NW – Suite 1000
Washington, DC 20036

Subject: Label Amendment – Added “Hot Tubs” as an alternate use for “Spa” and revised the label.
Product Name: Spa Chlorine Disinfectant
EPA Registration Number: 53735-14
Application Date: August 27, 2014
Decision Number: 495241

Dear Ms. Wacek:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. “To distribute or sell” is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Wanda Henson by phone at (703) 308-6345, or via email at Henson.Wanda@epa.gov.

Sincerely,

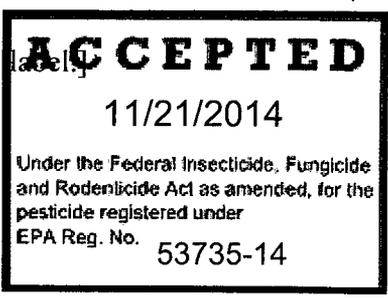
A handwritten signature in black ink that reads "Wanda J. Fuller, for". The signature is written in a cursive, flowing style.

Demson Fuller, Product Manager 32
Regulatory Management Branch II
Antimicrobials Division (7510P)
Office of Pesticide Programs

Enclosure

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[All text in brackets {xxx} is optional and may or may not be included on a final label.]
[All text in braces [xxx] is administrative and will not appear on a final label.]



[MASTER LABEL]

SPA CHLORINE DISINFECTANT
Prefilled Chlorine {Spa} {Hot Tub} {Sanitizer}{/}{Disinfectant}

Active Ingredient:

1,3-dichloro-5, 5-Dimethylhydantoin.....81.1%

1,3-dichloro-5-ethyl-5-methylhydantoin.....16.1%

Other Ingredients:..... 2.8%

Total:100.0%

Keep Out of Reach of Children

DANGER

**SEE FIRST AID AND PRECAUTIONARY
STATEMENTS ON BACK PANEL**

EPA Reg. No.: 53735-14

EPA Est. No.: xxxxx-xx

Distributed By: King Technology, Inc.
530 11th Ave S
Hopkins, MN 55343

Net Wt.: xxx grams

FIRST AID: If in Eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advise. If Swallowed: Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression, and convulsion may be needed.

IN CASE OF MEDICAL EMERGENCY CALL 1-800-424-9300.

PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS: DANGER: Corrosive. Causes irreversible eye and skin damage. May be fatal if swallowed. Irritating to nose and throat. Avoid breathing dust and fumes. Do not get in eyes, on skin or on clothing. Wear goggles or safety glasses and rubber gloves when handling product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

PHYSICAL AND CHEMICAL HAZARDS: STRONG OXIDIZING AGENT: Do not mix with other chemicals. Mix only with water. Never add water to product. Always add product to large quantities of water. Use clean dry utensils. Do not add this product to any dispensing device containing remnants of any other product. Such use may cause a violent reaction leading to fire and explosion. Contamination with moisture, organic matter or other chemicals will start a chemical reaction and generate heat, hazardous gas, possible fire and explosion. In case of contamination or decomposition, do not reseal container. If possible, isolate container in open air or well-ventilated area. Flood area with large volumes of water.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic organisms.

Note: Buyer assumes all responsibility for safety and use not in accordance with directions.

Product Description: The SPA CHLORINE DISINFECTANT is a {innovative} {revolutionary} way to maintain a low level of {chlorine} {sanitization} {disinfection} {tailor made} {perfect} for use with the Spa Frog Mineral Cartridge that reduces chlorine use. The SPA CHLORINE DISINFECTANT {may be} {is} used in the {In-line Spa System or} {Floating Spa System} for weeks of low level {chlorine} {sanitization} {disinfection} protection. Together they make {spa} {hot tub} care a breeze with up to 75%* less chlorine so the water feels softer and looks crystal clear with no smelly odors. Swimsuit colors stay bright and {spa} {hot tub} surfaces maintain their brilliance longer. Experience the difference minerals and SPA CHLORINE DISINFECTANT will make in your {spa} {hot tub}.

Directions for Use: It is a violation of federal law to use this product in a manner inconsistent with its labeling.

Ensure all {spa} {hot tub} equipment is working properly. The pump and filter should be operated for at least 3 hours per day. Clean filter following manufacturer's directions. Fill {spa} {hot tub} with fresh water and balance the water according to the water balance guidelines with pH between 7.2 – 7.8 and total alkalinity at 60 to 120 ppm. After balancing, establish a free chlorine residual of 0.5 to 1.0 ppm in the {spa} {hot tub} with Frog Jump Start or an EPA approved {spa} {hot tub} shock following the directions for that product. When using other products as outlined in directions for this product, always follow directions on those products.

Setting the Output: The SPA CHLORINE DISINFECTANT is prefilled and adjustable to meet the needs of each {spa} {hot tub} use. {Typically In-Line System users will begin on setting # while Floating System users will begin on setting # and adjust up or down from there.} {Hold the bottom and turn the top of the cartridge until the correct number appears in the setting window} {After connecting to the mineral cartridge turn the dial on the bottom of the chlorine cartridge to the desired setting number}. See the setting chart in the manual for best results.

{Then use SPA CHLORINE DISINFECTANT into {one of} the following system{s):}

{The In-line Mineral Spa System: Open cap of Inline System, push down and turn cartridge holder counter-clockwise to unlock. Pull holder out. Snap cartridge into {lower} {bottom} section {marked "Bromine or Chlorine Only"}. Make sure to line up indent on cartridge with raised line on holder. After cartridge is snapped in, replace holder by lining up arrow on holder with arrow on system lip, push down and rotate clockwise to lock in place. Replace cap.}

{The Floating Mineral Spa System: {Push the cartridge into the bottom opening of the Floating Spa System} {Line up the unlock symbol on the top mineral cartridge with the arrow on the bottom of the SPA CHLORINE DISINFECTANT cartridge. Push together and twist to {lock} {the desired setting}. {Set the dial on the chlorine cartridge} (see Setting the Output) and place entire system in the {spa} {hot tub} water.}

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When using the Spa Frog Mineral Cartridge, maintain a free chlorine level of 0.5 – 1.0 ppm. {Initially} {For the first week} monitor free chlorine levels daily and adjust the cartridge up or down by one setting per day until the desired chlorine level is achieved. Adjusting to a higher setting will increase the chlorine output while a lower setting will decrease it. When empty {the entire system will flip over letting you know it's time to replace.} follow disposal instructions and replace with a new SPA CHLORINE DISINFECTANT. Do not discard or recycle cartridge if a small amount of chlorine remains. Place in the {spa} {hot tub} to float on its own until completely empty.

Shock the {spa} {hot tub} or add clarifier occasionally if the water should become cloudy.

With SPA CHLORINE DISINFECTANT less shocking is required because of the chlorine bank (measured as total chlorine) that is {ready to use} {automatically converted to {active} {free} chlorine} when needed.

REENTRY into treated {spas} {hot tubs} is prohibited above levels of 5 ppm available{free} chlorine as measured by a suitable test kit due to risk of bodily injury.

STORAGE AND DISPOSAL: Do not contaminate food or feed by storage and disposal.

Pesticide Storage: Keep this product dry in original tightly closed container when not in use. Store in a cool, dry, well-ventilated area away from heat. Moisture may decompose this product and cause a violent reaction leading to fire and explosion. In case of decomposition, isolate container if possible and flood area with large amounts of water to dissolve material before discarding this container

Container Handling: Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Rinse thoroughly before recycling or discarding in trash.

[Disclaimers]

* Compared to the ANSI minimum recommended chlorine level of 2.0 ppm for a residential {spa} {hot tub}.

** Compared to daily shocking or shocking each time the {spa} {hot tub} is used

[Operational Instructions for In-Line Mineral Spa System]
[All text is optional]

In-Line System Operating Instructions

Congratulations!

Your {spa} {hot tub} came with a complete mineral and chlorine {sanitation} {disinfecting} {disinfection} system. When using the patented Spa Frog Mineral Cartridge with the proprietary SPA CHLORINE DISINFECTANT, you'll enjoy your {spa} {hot tub} more with less work and less chlorine.

Less Work Because:

- The Frog Mineral {System} {Technology} {Formula}+ continuously works to control bacteria for four full months.
- Cartridges last longer to eliminate daily maintenance.
- Cartridges are pre-filled for no measuring or mess.
- Simply adjust to your setting and relax for weeks {until it's time to replace the {chlorine} cartridge}.

Less Chlorine Because:

- With minerals in the water, chlorine use is cut by up to 75%.*
- It's precisely metered over : 2-4 weeks so it lasts longer (on a 350 gallon {spa} {hot tub} with average use).
- With minerals and low levels of chlorine, the water feels softer.
- The system reduces odors and leaves the water crystal clear.

You're going to love your Frog System. If you have any questions, contact our customer service representatives at **800-222-0169**.

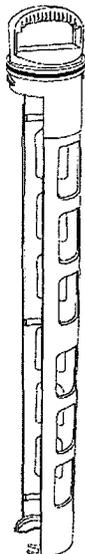
* Compared to the minimum ANSI recommended chlorine level of 2.0 ppm for a {spa} {hot tub}.

Let Us Dissect This Frog For You: The complete In-Line System

The In-Line System is made up of (A) a cap that is easily distinguishable among the fittings on the top {rim} {edge} of the {spa} {hot tub}, (B) a cartridge holder that pulls out of the system, (C) a mineral cartridge that helps control bacteria in the water and (D) a {chlorine} {sanitizer} {disinfectant} cartridge that helps support the minerals while oxidizing contaminants like body oils {and ammonia compounds responsible for smelly chloramines}. The cartridges are adjustable to meet your specific {spa} {hot tub} water care needs.



A. Frog Cap



B. Cartridge Holder



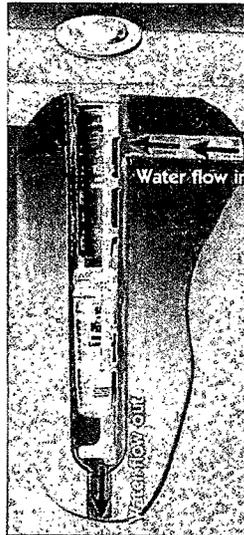
C. Mineral Cartridge



D. {Chlorine} {Sanitizer} {Disinfectant} Cartridge

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Cut-away view of cartridges snapped into holder and placed into the In-Line System.



Start Up · Follow all directions from your {spa} {hot tub} manufacturer on filling and balancing the water in your {spa} {hot tub}. Standard guidelines for balancing the water are as follows:

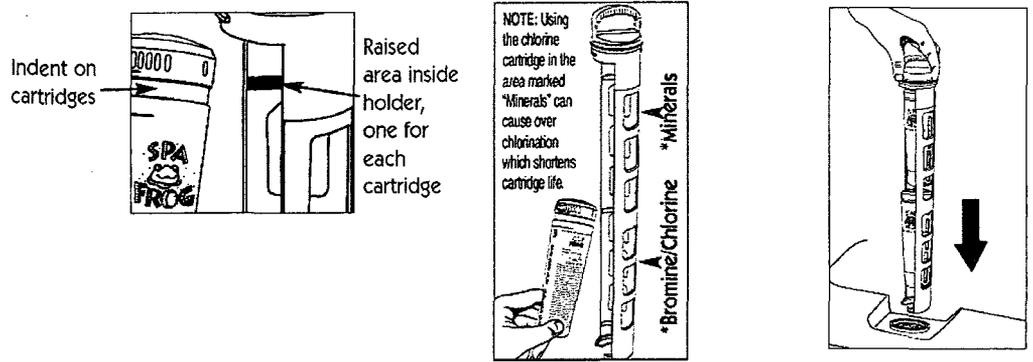
Water Balance Guidelines	
pH:	7.2-{7.6} {7.8}
Total Alkalinity:	60-120 ppm
Calcium Hardness:	150-400
Total Dissolved Solids:	<1500
*Free Chlorine:	0.5-1.0 ppm

NOTE: Free chlorine levels are reduced up to 75% when using Frog minerals

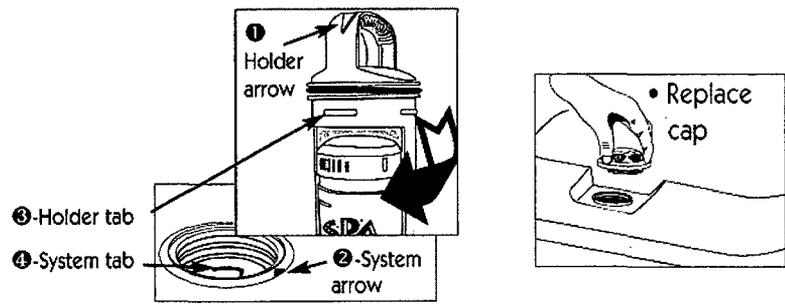
- Use a metal out or sequestering agent if fill water is high in metals. Wait 24 hours before continuing start up.
- **Very Important!** {Shock {spa} {hot tub} to establish a 0.5-1.0 ppm free chlorine residual. Add directly to {spa} {hot tub} following manufacturers' directions.} {Before using cartridges, establish an initial residual of 0.5-1.0 ppm free chlorine with a chlorine shock.} {For best results use Frog Jump Start start-up {spa} {hot tub} shock packet that quickly dissolves with an effervescent fizzing action – one packet per 500 gallons} {Do not use a non-chlorine shock as it cannot establish a chlorine residual.} Do NOT add any shock product through the In-Line System. Use {the appropriate chlorine test strips or kit and follow manufacturer's instructions.} {Frog Test Strips to accurately maintain the reduced 0.5 to 1.0 ppm chlorine level following the label directions carefully.}
- When {spa} {hot tub} reaches operating temperature per your {spa} {hot tub} manufacturer's directions, set the mineral and {chlorine} {sanitizer} {disinfectant} cartridges according to directions on [phrase will be inserted here to direct the user to the place on the market label that the {spa} {hot tub} care procedures can be found] and insert them into the System.

Replacing Cartridges

- Open cap of In-Line System and set aside. DO NOT OPEN CAP WHILE JETS ARE ON.
- Remove holder by pushing down and turning counterclockwise before pulling out.
- Remove spent cartridges by pushing bottom out through openings in back of holder. Then grab cartridge and pull out.
- Snap the Spa Frog Mineral Cartridge into the area marked "Minerals" (top portion) and the SPA CHLORINE DISINFECTANT into the area marked "Bromine or Chlorine" (bottom portion) making sure to line up the indentation at the top of the cartridges with the raised area on the holder.



- Slowly insert holder into system (see diagrams). Line up holder arrow-① with system arrow-②. Push down until holder tabs-③ go past system tabs-④ and turn holder to the right (clockwise) until it stops. To ensure a locked position, attempt to pull holder up. If it stays in place, the lock is secure.



- Begin regular {spa} {hot tub} care procedures (see page #) as soon as start-up is complete.

Adjusting and When to Replace Spa Frog Mineral Cartridge:

- Set the {color} Spa Frog Mineral Cartridge wide open on #6 by holding the bottom and turning the top until the number 6 appears in the setting window. No further adjustments are necessary.
- The Spa Frog Mineral Cartridge must be replaced every 4 months. After four months of use, or when draining and refilling the {spa} {hot tub} with fresh water, discard Spa Frog Mineral Cartridge in trash even if, upon shaking, it appears there is spent media left inside. Once wetted the time released minerals in the cartridge are effective up to four months. Do not attempt to reuse the product once removed from the {spa} {hot tub}. For ease in remembering, mark your calendar with the Reminder Stickers included with this manual {See {spa} {hot tub} manufacturer's draining recommendations.}

Adjusting and When to Replace SPA CHLORINE DISINFECTANT:

{As every {spa} {hot tub} is different, finding the right setting for the {color} {chlorine} {sanitizer} {disinfectant} cartridge will require monitoring your usage for the first week or two.} Begin with an initial setting based on the chart {below} {on page #} and monitor free chlorine levels daily or before each use, adjusting the cartridge by one setting per day until a 0.5-1.0 ppm level has been achieved.

Use Frog Test Strips that show the exact active (free) chlorine color you should match when using Frog minerals. If the water test shows lighter than that color, the chlorine level is low. To adjust cartridge, remove from system and turn to the next highest setting. If the water test shows darker than that color, the chlorine level is high so the setting should be decreased by one number. If the chlorine bank (total) reading is lighter than the color on the bottle, check the cartridge as it may be empty.

{If using standard test strips, the free chlorine level should be 0.5 ppm {to 1.0 ppm}. The total chlorine level will be high when the {product} {cartridge} is first {used} {installed} and slowly come down over the life of the cartridge. When {it} {the total chlorine {reading}} is at 3.0 ppm, check to see if the cartridge is empty.}

The {color} {chlorine} {sanitizer} {disinfectant} cartridge needs to be replaced when empty. Drain water from the cartridge and ensure it is empty before discarding in trash or offering for recycling. On most {spas} {hot tubs}, it will last between 2 and 4 weeks. Always maintain at least 0.5 ppm free chlorine level.

INITIAL START-UP SETTING

	{Spa} {Hot Tub} Size (Gallons)		
Daily Filter Time	250-300	300-400	400-500
One Hour	#	#	#
Two Hours	#	#	#
Four Hours	#	#	#
24 hour @ low flow	#	#	#

NOTE: The more you use the {spa} {hot tub}, for instance when you first get it, the greater the setting to achieve at least 0.5 ppm. (This may require a higher setting than what is listed in the chart.) If usage decreases or the chlorine level is greater than 1.0 ppm, lower the setting.

Regular {Spa} {Hot Tub} Care Procedures:

Always follow the directions for operating your particular {spa} {hot tub}.

- Run filtration system as directed by your {spa} {hot tub} manufacturer to maintain proper water flow through the In-Line System.
- Periodically test the water to maintain pH, total alkalinity, {calcium hardness} and a 0.5 to 1.0 ppm {active} {free} chlorine level {with the precise Frog Test Strips that include special directions for using with Frog products}.

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- Maintain at least a 0.5 ppm of free chlorine at all times. The SPA CHLORINE DISINFECTANT forms a chlorine bank that is measured as total chlorine on a standard test strip/kit. This chlorine bank readily shifts to free chlorine as needed to maintain {a desirable} {our recommended} low level of chlorine {available for disinfection}. {Based on average {spa} {hot tub} usage,} chlorine will last {on average} {about} {up to} {2-4 weeks for {spas} {hot tubs} up to {400} {500} gallons.}
- Shock the {spa} {hot tub} {with granular chlorine or a non-chlorine shock} if the water looks cloudy or add a {spa} {hot tub} clarifier according to label directions. With SPA CHLORINE DISINFECTANT, far less shocking is required compared to standard water treatments that require weekly shocking.
- Remember to replace your Spa Frog Mineral Cartridge and SPA CHLORINE DISINFECTANT as directed under "Adjusting and When to Replace".
- Lubricate o-ring twice a year with a silicone lubricant.

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[Operational Instructions for Floating Mineral Spa System]
[All text is optional]

Floating System Operation Instructions

Congratulations! Your {spa} {hot tub} came with a complete mineral and chlorine {sanitation} {disinfecting} {disinfection} system. When using the patented Spa Frog Mineral Cartridge with the {proprietary} SPA CHLORINE DISINFECTANT, you'll enjoy your {spa} {hot tub} more with less work and less chlorine {or chlorine}.

Less Work Because:

- The Frog Mineral {System} {Technology} {Formula}+ continuously works to control bacteria for four full months.
- Cartridges last longer to eliminate daily maintenance.
- Cartridges are pre-filled for no measuring or mess.
- Simply adjust to your settings and relax {for weeks} {until it's time to replace the {chlorine} cartridge}.

Less Chlorine Because:

- With minerals in the water, chlorine use is cut by up to 75%.*
- Chlorine lasts longer: 2-4 weeks on a 350 gallon {spa} {hot tub} with average use.
- With minerals and low levels of chlorine, the water feels softer.
- The system reduces odors and leaves the water crystal clear.

You're going to love your Frog System. If you have any questions, contact our customer service representatives at **800-222-0169**.

* Compared to the minimum ANSI recommended chlorine level of 2.0 ppm for a {spa} {hot tub}.

{Spa} {Hot Tub} Start Up

- Always drain and refill {spa} {hot tub} at least every 4 months.
- Clean and replace filter cartridges when dirty (*Follow manufacturer's instructions*).
- Balance water according to the chart.
- Heat water to recommended temperature before using cartridges.
- **Very Important!** Before using cartridges, establish an initial residual of 0.5-1.0 ppm free chlorine with a chlorine shock. {For best results use Frog Jump Start start-up {spa} {hot tub} shock packet that quickly dissolves with an effervescent fizzing action – one packet per 500 gallons.} {Do not use a non-chlorine shock as it cannot establish a chlorine residual.} Use {the appropriate chlorine test strips or kit and follow manufacturer's instructions.} {Frog Test Strips to accurately maintain the reduced 0.5 to 1.0 ppm chlorine level following the label directions carefully.}
- Begin regular {spa} {hot tub} care procedures (see [phrase will be inserted here to direct the user to the place on the market label that the {spa} {hot tub} care procedures can be found]) as soon as start-up is complete.

Water Balance Guidelines	
pH:	7.2 – {7.6} {7.8}
Total Alkalinity:	60 – 120 ppm
Calcium Hardness:	150-400
Total Dissolved Solids:	<1500
*Free Chlorine:	0.5 – 1.0 ppm

NOTE: Free Chlorine levels are reduced up to 75%* when using Frog minerals

Setting Cartridges

- Set the {color} mineral cartridge to wide open on #6 by holding the bottom and turning the top until the number 6 appears in the setting window. No further adjustments are necessary.
- {As every {spa} {hot tub} is different, finding the right setting for the {color} {chlorine} {sanitizer} {disinfectant} cartridge will require monitoring your usage for the first week or two.} Begin with an initial setting based on the chart {below} {on page #} and monitor free chlorine levels daily or before each use adjusting the cartridge by one setting per day until a 0.5-1.0 ppm level has been achieved.
- Use Frog Test Strips that show the exact active (free) chlorine color you should match when using Frog minerals. If the water test shows lighter than that color, the chlorine level is low. To adjust cartridge, remove from holder and turn to the next highest setting. If the water test shows darker than that color, the chlorine level is high so the setting should be decreased by one number. If the chlorine bank (total) reading is lighter than the color on the bottle, check the cartridge as it may be empty.
- {If using standard test strips, the free chlorine level should be 0.5 ppm {to 1.0 ppm}. The total chlorine level will be high when the {product} {cartridge} is first {used} {installed} {placed in the {spa} {hot tub}} and slowly come down over the life of the cartridge. When {it} {the total chlorine {reading}} is at 3.0 ppm, check to see if the cartridge is empty.}
- The {chlorine} {sanitizer} {disinfectant} cartridge needs to be replaced when empty. Drain water from the cartridge and ensure it is empty before discarding in trash or offering for recycling. On most {spas} {hot tubs}, it will last between 2 and 4 weeks. Always maintain at least 0.5 ppm free chlorine level.

INITIAL START-UP SETTING

	{Spa} {Hot Tub} Size (Gallons)		
Daily Filter Time	250-300	300-400	400-500
One Hour	#	#	#
Two Hours	#	#	#
Four Hours	#	#	#
24 hour @ low flow	#	#	#

NOTE: The more you use the {spa} {hot tub}, for instance when you first get it, the greater the setting to achieve at least 0.5 ppm. (This may require a higher setting than what is listed in the chart.) If usage decreases or the chlorine level is greater than 1.0 ppm, lower the setting.

Using the Floating System

- Insert both cartridges into the green floating holder by pushing them into the openings until they stay in place.
- Let the Floating System free-float in the {spa} {hot tub}.
- When using the {spa} {hot tub}, simply remove the system, drain most of the water into the {spa} {hot tub} and set on the side of the {spa} {hot tub} inverted so all excess water drains into the holder. REMEMBER TO REPLACE {THE FLOATING SYSTEM}

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{IT} BACK IN THE WATER WHEN FINISHED USING THE {SPA} {HOT TUB}!

Replacing Cartridges

- The Spa Frog Mineral Cartridge must be replaced every 4 months. After four months of use, or when draining and refilling the {spa} {hot tub} with fresh water, discard Spa Frog Mineral Cartridge in trash even if, upon shaking, it appears there is spent media left inside. Once wetted the time released minerals in the cartridge are effective up to four months. Do not attempt to reuse the product once removed from the {spa} {hot tub}. For ease in remembering to replace, mark your calendar with the reminder stickers provided with product.
- Replace the {chlorine} {sanitizer} {disinfectant} cartridge when empty. Drain water to ensure cartridge is empty then discard in trash {or offer for recycling}. The cartridge life will vary depending on {spa} {hot tub} size and number of users. Once your usage is determined, mark the calendar with enclosed reminder stickers.

Regular {Spa} {Hot Tub} Care

- Run filtration system as recommended by your {spa} {hot tub} manufacturer.
- {Periodically test the water to maintain pH, total alkalinity, calcium hardness and a 0.5 ppm {active} {free} chlorine level {with the precise Frog Test Strips that include special directions for using with Frog products}.
- Maintain at least a 0.5 ppm free chlorine level at all times. The SPA CHLORINE DISINFECTANT forms a chlorine bank that is measured as total chlorine on a standard test strip/kit. This chlorine bank readily shifts to free chlorine as needed to maintain {a desirable} {our recommended} low level of chlorine {available for disinfection}. {Based on average {spa} {hot tub} usage,} chlorine will last {on average} {about} {up to} {2-4 weeks for {spas} {hot tubs} up to {400} {500} gallons.}
- Shock the {spa} {hot tub} {with granular chlorine or a non-chlorine shock} if the water looks cloudy or add a {spa} {hot tub} clarifier according to label directions. With SPA CHLORINE DISINFECTANT, far less shocking is required compared to standard water treatments that require weekly shocking.
- Remember to replace Spa Frog Mineral Cartridge and SPA CHLORINE DISINFECTANT as directed under "Replacing Cartridges".

[Operational Instructions for Floating Mineral Spa System 2]

[All text is optional]

Floating System Operation Instructions

This is not a toy. For sanitizing {spas} {hot tubs} only!

{Welcome to Fresh Mineral Water with Smart Chlor technology courtesy of Frog. This {spa} {hot tub} water care system destroys bacteria to keep your {spa} {hot tub} clean with less work and up to 75% less chlorine.* There are two cartridges – the top one holds our patented mineral formula while the bottom one has a new kind of chlorine that is smart about when its needed and when its not. Its revolutionary formula creates a bank of chlorine that is {equivalent to} {detected as} {read as} {measured as} a total chlorine reading on a test strip. Over time, this bank automatically converts to {active} {free} chlorine when needed to take care of the bacteria and contaminants in the water. The {active} {free} level stays at a low 0.5 ppm which is tailor made for use with Frog minerals that reduce chlorine use up to 75%.

Simply {connect}, {turn} {twist} the dial to set and {toss into} {plop in} the {spa} {hot tub}. Everything is prefilled and contained for no mess, no guess {and} no stress {spa} {hot tub} care. The best part is it flips over when {empty} {out} {it's time to replace {a} {the} {chlorine} cartridge}.

Register your Floating System at kingtechnology.com

{Spa} {Hot Tub} Start Up

- Always drain and refill {spa} {hot tub} at least every 4 months.
- Clean and replace filter cartridges when dirty (*Follow manufacturer's instructions*).
- Use test strips or a test kit to balance your water according to the water balance guidelines. The {spa} {hot tub} Frog system will {control} {maintain} the free chlorine level. pH is affected by weather and the make up of your source water.

NOTE: Free Chlorine levels are reduced up to 75%* when using Frog minerals

Water Balance Guidelines	
pH:	7.2 – {7.6} {7.8}
Total Alkalinity:	60 – 120 ppm
Calcium Hardness:	150-400
Total Dissolved Solids:	<1500
*Free Chlorine:	0.5 – 1.0 ppm

- Heat water to recommended temperature before using cartridges.
- **Very Important!** Before using cartridges, establish an initial residual of 0.5-1.0 ppm free chlorine with a chlorine shock. {For best results use Frog Jump Start start-up {spa} {hot tub} shock packet that quickly dissolves with an effervescent fizzing action – one packet per 500 gallons.} {Do not use a non-chlorine shock as it cannot establish a chlorine residual.} Use {the appropriate chlorine test strips or kit and follow manufacturer's instructions.} {Frog Test Strips to accurately maintain the reduced 0.5 ppm chlorine level following the label directions carefully.}
 1. Remove {the} {outer} packaging from both the mineral and chlorine cartridges. NOTE: Small mineral particles may have dislodged from the cartridge in shipping. Simply discard {particles} in trash. Bring the two cartridges together and line up the arrow on the chlorine cartridge with the unlock symbol on the mineral cartridge. {Push together and twist to {lock} {the lock symbol} {the desired setting number.} {Rotate the two cartridges {until you hear the {safety}

{locking} tab click into place} {90° to lock in place}.

2. {Setting the Chlorine Output}

- {Twist the mineral cartridge opposite of the chlorine cartridge until the setting number for your {spa} {hot tub} size is lined up with the arrow (see chart below).} {Twist the dial on the {bottom} {chlorine} cartridge to the setting {number} for your {spa} {hot tub} size (see chart).} {Start with the {factory} {middle} {center} {medium} setting.}
- For the first week or so test the water daily with Frog Test Strips that show the exact active (free) chlorine color you should match when using Frog minerals. If the water test shows lighter than that color, the chlorine level is low, {Twist the two cartridges opposite each other to reach one setting higher.} {Turn the dial on the chlorine cartridge to the next highest setting.} If the water test shows darker than that color, the chlorine level is high so the setting should be decreased by one number. Even at the lowest setting {of 0} there will be some chlorine released into the {spa} {hot tub}. If the chlorine bank (total) reading is lighter than the color on the bottle, check the chlorine cartridge as it may be empty.
- {If using standard test strips, the free chlorine level should be 0.5 ppm {to 1.0 ppm}. The total chlorine level will be high when the product is first {used} {installed} {placed in the {spa} {hot tub} and slowly come down over the life of the cartridge. When {it} {the total chlorine {reading}} is at 3.0 ppm, check to see if the cartridge is empty.}
- The {color} {chlorine} {sanitizer} {disinfectant} cartridge needs to be replaced when empty. Drain water from the cartridge and ensure it is empty before discarding in trash or offering for recycling. Always maintain at least 0.5 ppm free chlorine level.

INITIAL START-UP SETTING

	{Spa} {Hot Tub} Size (Gallons)		
Daily Filter Time	250-300	300-400	400-500
One Hour	#	#	#
Two Hours	#	#	#
Four Hours	#	#	#
24 hour @ low flow	#	#	#

NOTE: The more you use the {spa} {hot tub}, for instance when you first get it, the greater the setting to achieve at least 0.5 ppm. (This may require a higher setting than what is listed in the chart.) If usage decreases or the chlorine level is greater than 1.0 ppm, lower the setting.

3. Once set, simply toss it into the {spa} {hot tub} {or tether it to the side of the {spa} {hot tub} with the cord provided away from the skimmer or a return jet.} {Use {the enclosed cord} {a string} tied to the {loop} {hole} in the product.}

[graphic callouts:] {insert color} mineral cartridge, {insert color} chlorine cartridge, Setting {#} on mineral cartridge, Twist {mineral opposite of chlorine} {dial on bottom of chlorine cartridge}

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4. Test the water periodically with Frog Test Strips to maintain pH, total alkalinity, calcium hardness and a 0.5 ppm active (free) chlorine level {with the precise Frog Test Strips that include special directions for using with Frog products}. {Based on average {spa} {hot tub} usage,} chlorine will last {on average} {about} {up to} {2-4 weeks for {spas} {hot tubs} up to {400} {500} gallons.
 5. Follow regular {spa} {hot tub} care procedures on [phrase will be inserted here to direct the user to the place on the market label that the {spa} {hot tub} care procedures can be found]

Replacing the Chlorine Cartridge

When the {product} {chlorine cartridge} is almost empty {it} {the system} will {begin to} slowly {flip} {roll} over giving you {a day or two} notice that it's about time to replace. If it stays on its side longer than a day or two, pull unit out of the water and let it drain. Reset it in the water to see if it flips completely. {If it does} {When it completely {flips} {rolls} over} replace by {rotating the two cartridges until the arrow on the chlorine cartridge aligns with the unlock symbol on the mineral cartridge and pull apart}. {Follow Step #1 above for attaching a filled chlorine cartridge}.

Do not remove the chlorine cartridge until the system has completely flipped. If the chlorine cartridge {still} contains a small amount of chlorine after the system has {flipped} {rolled} over, place in the {spa} {hot tub} alone until completely empty. Do not allow the chlorine cartridge to sink to the bottom or bleaching of the {spa} {hot tub} surface could occur. When completely empty, discard in trash {or offer for recycling}.

Regular {Spa} {Hot Tub} Care

- Run filtration system as recommended by your {spa} {hot tub} manufacturer.
- Periodically test water for pH, total alkalinity, calcium hardness and free chlorine levels {with the precise Frog Test Strips.}
- Maintain at least a 0.5 ppm free chlorine level at all times. The SPA CHLORINE DISINFECTANT forms a chlorine bank that is measured as total chlorine on a standard test strip/kit. This chlorine bank readily shifts to {active} {free} chlorine as needed to maintain {a desirable} {our recommended} low level of chlorine {available for disinfection}.
- Shock the {spa} {hot tub} {with granular chlorine or a non-chlorine shock} if the water looks cloudy and/or add a {spa} {hot tub} clarifier according to label directions. With SPA CHLORINE DISINFECTANT, far less shocking is required compared to standard water treatments that require weekly shocking.
- Replace the {complete Floating System} {Spa Frog Mineral Cartridge} every 4 months or when draining and refilling the {spa} {hot tub}. Even if, upon shaking, it appears there is spent media left inside, once wetted the time released minerals in the cartridge are effective up to four months. Replace the SPA CHLORINE DISINFECTANT cartridge when empty. Follow directions under "Replacing the Chlorine Cartridge."

NOTE: This product may be removed from the {spa} {hot tub} when in use. Lift out of the water and let drain into the {spa} {hot tub}. Then place on the rail of the {spa} {hot tub} or surface that is not susceptible to bleaching from the chlorine. Remember to replace the product once exiting the {spa} {hot tub}.

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[All text on this page is optional]

A perfect companion to {minerals} {reduced chlorine systems}

The chlorine that makes it easy to maintain 0.5 ppm free chlorine.

Don't just use chlorine – use {less!} {chlorine with a {twist} {difference} {distinction}}

The controlled-release chlorine {that's ready when {you need it} {needed}} {that lasts for weeks}

Ideal for high bather loads as chlorine is ready when {you need it} {needed}

A more efficient way to use chlorine {that} {to} disinfect{s} and oxidize{s}

Reduces {free} chlorine use up to 75%* {when used with Frog minerals}

The low-chlorine solution for Frog mineral systems

SPA CHLORINE DISINFECTANT dissolves slower than standard chlorine products making it easier to maintain a low level, and easier to avoid over chlorination

Reduces the need to shock

No additional shocking needed before or after {spa} {hot tub} use

Reduces shocking by up to 75%**

Less work with prefilled cartridges, precise output and {fewer} {minimal} shock treatments

The chlorine {that actually helps maintain a neutral pH} {with a built-in pH stabilizer}

{Because} {When} {the} {your} pH {stays} {is} neutral, {the} {your} {free} chlorine is {more effective} {at its best}.

With fewer pH adjustments and less shocking required, SPA CHLORINE DISINFECTANT uses less chemicals than standard {spa} {hot tub} water treatments

Reduces overall chemical use with less shocking and pH adjustments

SPA CHLORINE DISINFECTANT {cartridge} contains chlorine but with a {positive} {beneficial} {innovative} twist

- It reduces the potential for pH decline
- It prevents smelly {chloramine} odors
- It nearly eliminates shocking
- It helps prevent over chlorinating {It lasts longer when used with minerals}
- {With minerals, it lasts longer}

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The SPA CHLORINE DISINFECTANT forms a chlorine bank that is measured using a total chlorine test. This chlorine bank readily shifts to free chlorine as needed to maintain a desirable low level of chlorine available for disinfection.

Unlike {all} other chlorines, there is no need to shock when the total chlorine is {twice the level of} {higher than} the free chlorine. Instead, the chlorine bank, (measured as total chlorine) is waiting to shift to free chlorine as {needed} {it is depleted}. This also allows for the SPA CHLORINE DISINFECTANT {to oxidize odor causing contaminates {like chloramines}} {to nearly eliminate odor causing contaminates} from your {spa} {hot tub} water.

When testing your water, there is no need to compare the total chlorine level to the free. Simply maintain a low 0.5-1.0 ppm free chlorine at all times. However if you notice your total chlorine dropping, that is a good sign that the cartridge may be getting{nearly} empty.

SPA CHLORINE DISINFECTANT {boosts the concentration of} {super charges} Frog minerals for even greater effectiveness

The {combination} of Frog minerals and SPA CHLORINE DISINFECTANT is very effective in hot water environments as it is easier to maintain a low chlorine level.